

EPISOMAL NON-TRANSFORMING NUCLEIC ACID ELEMENTS IN
FUNCTIONAL GENOMIC AND ANTIGENIC APPLICATIONS

ABSTRACT

5 The present invention provides a method for functional genomic analysis and
antigen prototyping by introducing episomal non-transforming non-viral vector-based
cDNA or genomic libraries of donor organisms, pathogens, or cancer cells into host
cells. The DNA libraries can be compacted without substantial aggregation to
facilitate uptake by host cells. Antigen prototyping can be to identify antigens of
10 pathogens that confer immuno-protection against the pathogens and antigens of cancer
cells that confer immuno-protection against the cancer cells..